



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/679,614

10/06/2003

Takeshi Watanabe

9281-4690

3329

757 7590 04/06/2011  
BRINKS HOFER GILSON & LIONE  
P.O. BOX 10395  
CHICAGO, IL 60610

EXAMINER

CHIEN, LUCY P

ART UNIT

PAPER NUMBER

2871

MAIL DATE

DELIVERY MODE

04/06/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/679,614	WATANABE, TAKESHI	
	<b>Examiner</b>	<b>Art Unit</b>	
	LUCY P. CHIEN	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,5,8 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5,8 and 13-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/6/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____   | 6) <input type="checkbox"/> Other: _____                          |

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/15/2011 has been entered.

***Response to Arguments***

Applicant's arguments with respect to claim 1,5,8,13-15 have been considered but are moot in view of the new ground(s) of rejection.

***Terminal Disclaimer***

Terminal Disclaimer sent in on 8/12/2010 has been disapproved. POA can be given to a customer number, wherein all practitioners listed under the customer number have POA. If POA is established by a list of practitioners, the list may not comprise more than 10 practitioners. A representative of the assignee, who is not of record, cannot sign the TD unless it is established that the representative is a party authorized to act on behalf of the assignees.

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory

obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1,13,14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1-3 of copending Application No. 12751614. Although the conflicting claims are not identical, they are not patentably distinct from each other because

Claim 1 is obvious over Claim 1 of copending Application No. 12751614

Claim 13 is obvious over Claim 2 of copending Application No. 12751614

Claim 14 is obvious over Claim 3 of copending Application No. 12751614

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 1,5,8,13-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ooi et al (US 5283675) in view of Sakata (US 4729640)

Regarding Claim 1,5,

Ooi et al discloses (Figure 1) a liquid crystal display comprising a transparent coordinate input device comprising a first transparent base material (2) having a first transparent resistance film thereon (3 made of ITO which is transparent) and a second transparent base material (4) facing said first transparent base material (2) with a clearance there between and having a second transparent resistance film (5) disposed on a face thereof opposing the first transparent resistance film (3), wherein a first transparent base material (2) is disposed below the second transparent base material (2) and a first plurality of ridge portions are formed only on a surface of the first transparent base material (2) that faces the second transparent base material (4) and a second plurality of ridge portions (concave and convex portions) are formed only on a

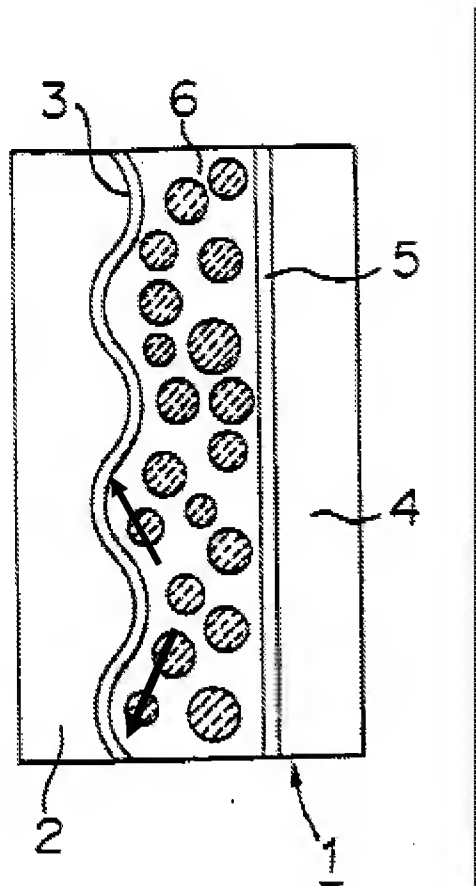
surface of the second transparent base material that faces the first plurality of ridge portions; wherein the surface of the first transparent resistance film (3) in each section of the ridge portions includes a top portion and first and second slanted faces on corresponding sides of the top portion (shown below), wherein the first and second faces are symmetrically in-line with respect to the top portion; The resistance film (3) is formed over a valley between adjacent ridge portions (top of 2); wherein the ridge portions are adjacent to each other and are formed with a -predetermined pitch and formed by continuously extending the ridge portions. Wherein a lower face of the second transparent base material (4) disposed on an operation side and a lower face of the second transparent resistance film (5) are smooth surfaces and wherein the second base material (4) and the second transparent resistance film (5) are configured to flex towards the first transparent base material based on input received during operation (if anything touches the top of the substrate, the display will flex).Wherein the pitch of the top of the ridge portion (3)and the transparent substrate (2) of said ridge portions is 100  $\mu\text{m}$  (column 5, lines 65-67) which are overlapping ranges of the 100 to 500  $\mu\text{m}$  inclusive. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the pitch of the ridge portion to be 100-500 $\mu\text{m}$  since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Ooi et al does not disclose Nor the ridge portions have a polygonal shape is a triangular shape having an obtuse angle in section are narrow in width, and are

projected strips longitudinally extending in one direction. Nor does Tanaka disclose the heights of the ridge portions.

Sakata also discloses (fig. 2 and 12a) wherein the polygonal shape of the ridge portions comprises one of a triangular shape (shown 3 and 4') wherein a vertical angle of the triangular shape in the section of the ridge portion is an obtuse angle (circled below it is opened more than 90 degrees). The ridge portions is formed along the projected strips longitudinally extending in one direction of the ridge portions, and has an obtuse angle vertical angel in each section of the ridge portions because of easiness of manufacture and orientation capability (column 15,lines 40-43)

Sakata also discloses wherein the-heights of said ridge portions is 0.7 to 22  $\mu\text{m}$  (column 5, lines 1-5) which is an overlapping range of 0.1 to 10  $\mu\text{m}$  inclusive [0066] It would have been obvious to one of ordinary skill in the art at the time the invention was made to height of the ridge portion to be 0.1 to 10  $\mu\text{m}$  since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

It would have been obvious to modify Ooi et al to include Sakata's polygonal shape of the ridge portions comprising one of a triangular shape wherein a vertical angle of the triangular shape in the section of the ridge portion is an obtuse angle motivated by the desire to ease the manufacture and orientation capability (column 15,lines 40-43) to further include Sakata's ridge height motivated by the desire to influence the orientation of the liquid crystal effectively (column 1-15).



Regarding Claim 8.

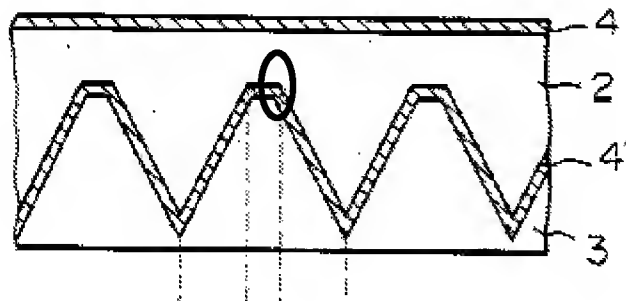
In addition to Ooi et al and Sakata's as disclosed above, Ooi et al discloses (Figure 1) wherein said ridge portion (concave convex) is extended in a direction inclined at a constant angle with respect to each of two perpendicular sides for partitioning a pixel of said liquid crystal display panel.

Regarding Claim 13,14.

In addition to Ooi et al and Sakata's as disclosed above, Ooi et al discloses (Figure 1) the first transparent resistance film (3) formed on the upper face between the

ridge portion (top of 2 where it contacts 3) wherein an angle of a valley between the ridge portion adjacent to each other in section is an obtuse angle (angle between 90-180 degrees shown circled below)

*Fig. 12A*



Regarding Claim 15.

In addition to Ooi et al and Sakata's as disclosed above, Ooi et al discloses (Figure 1) the thickness of the transparent resistance film is 200 Angstrom which is 0.02  $\mu\text{m}$  which is an overlapping range of 0.01  $\mu\text{m}$  (100 angstrom) to 0.05  $\mu\text{m}$  (500 angstrom). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the thickness of the transparent resistance film to be 0.01  $\mu\text{m}$  (100 angstrom) to 0.05  $\mu\text{m}$  (500 angstrom) since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUCY P. CHIEN whose telephone number is (571)272-8579. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571)272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lucy P Chien/  
Examiner, Art Unit 2871